

REGULATION AND DEVELOPMENT: REFLECTIONS IN THE AFTERMATH OF NEOLIBERALISM

Luciano G. Coutinho

INTRODUCTION

The neoliberal offensive of the 1990s aimed to extend the paradigm of competition into every sphere as a means of achieving social welfare and efficiency. In doctrinal terms promoting the combination privatization-plus-competition became an end in itself. By ignoring the strength of scale and scope economies, and by imagining it was possible to dismantle or dismember the large, capital-intensive network infrastructure systems characteristic of major public utilities with no counterproductive after-effects, this utopia caused failures and waste. Attempts to break up these activities horizontally and/or vertically, especially in the United Kingdom and United States, were mostly ineffectual. They destroyed the economies of scale and integration without achieving lasting gains in terms of efficiency, quality and lower user charges. Several examples can be found in the power and transportation sectors.

The first lesson is that privatization and competition worked well in typically private segments such as industries that had been developed or absorbed by the state owing to the fragility of their capital structure when in private hands (e.g. steel, mining, shipbuilding or petrochemicals). In infrastructure and public services (telecommunications, energy, water supply, transportation etc) the experience was problematical, however. Except in telecom, where a technological revolution has modified the conditions that gave rise to the original natural monopoly while creating new opportunities for profitable business models in the private sector (e.g. wireless and mobile telephony, Internet service etc), the neoliberal paradigm has produced mediocre results. In natural monopolies, where scale economies are powerful,

investments take a long time to mature and externalities are present, the private model tends to run into difficulties hard to overcome.

The social mission intrinsic to infrastructures that provide public services and utilities is indeed basically incompatible with the private investor's goal of maximizing profit. This investor requires far higher rates of return on his capital, and relative prices therefore logically need to be higher in order to remunerate capital at such high rates. This paper argues that the choice of a basic model — public or private — should be preceded by a comprehensive and painstaking review of the pros and cons of each option. Under certain conditions, privatization combined with light and efficient regulation can reconcile the objectives of generating private returns and maximizing social utility. Under other conditions, the option for maintaining a public monopoly operated by state-owned enterprises with efficient management may offer a better alternative, facilitating a convergence between returns to capital and to society.

The regulatory framework and planning conditions — indispensable in either case, it is argued here — should obviously correspond to and be compatible with the characteristics of the operating model chosen.

I THE BASELESSNESS OF THE COMPETITIVE OPTIMIZING PARADIGM

The foundations of the neoliberal paradigm rest on a belief in the efficiency, if not the perfection, of markets as inducers of solutions that maximize welfare (Pareto optimality). According to this postulate (which ignores or belittles the presence of scale economies and externalities, disregards transactions costs, and moreover underestimates the importance of republican practice in democratic regimes), public regulation is assumed always to be inherently spurious, suboptimal and conducive to corruption.¹ The normative prescription of this paradigm is as radical as its foundations are unrealistic: regulation is to be scrapped, everything is to be privatized, and the role of the state is to be minimized, leaving only its role as guarantor of private property rights; competition should be created forcibly whenever it is “impeded”, even if this requires the dismemberment of the large corporations and respective monopolistic or oligopolistic structures.

The paradigm rests on unrealistic foundations first of all because it assumes diseconomies of scale and the existence of a large number of producers. This is simply not the case in the real world. Or when it is the case, it is an exception. Small producers predominate in few sectors of modern economies (mainly services). In fact, the dominant industrial paradigm is the oligopoly, with a small number of large players competing on the basis of constant returns to scale in the market space most relevant for price formation. In many sectors, however, scale economies are more powerful — increasing returns are obtained (falling unit costs) and this leads to higher levels of oligopolistic concentration and, at the extreme, to monopoly.²

In proposing and potentially implementing the fragmentation of efficient monopolies (or oligopolies) with the aim of generating competition, neoliberal policy makers ignore increasing returns to scale and risk introducing inefficient solutions. However, when challenged about this risk the most sophisticated theoreticians recommend more moderate therapies to introduce competitive mechanisms. One prescription is forced sharing of the monopolist's infrastructure by new entrants (e.g. competitive "mirror" startups v. incumbents in the case of telephony). As shown below, however, mechanisms designed to introduce or mimic competition are often counterproductive as far as promoting social welfare is concerned and may constitute inferior solutions in terms of productive, allocative and distributive efficiency.

In short, increasing returns to scale are an important and irrefutable part of the real world. Moreover, they determine that the maximization of economic efficiency generally requires large fixed-capital structures and a substantial concentration of market power. This makes the need for regulation unavoidable. Public regulation (sector and/or anti-trust) that directly oversees the conduct and performance of these structures can generate more efficient solutions from the economic and social standpoints under certain conditions, as will be shown below. Rejection of regulation coupled with unconditional adoption of the private model and forcible introduction of competition may well be incompatible with the goal of maximizing social utility, not to mention the need for major investment in infrastructure in developing economies.

2 INTENSE COMPETITION IN OLIGOPOLISTIC STRUCTURES

Oligopoly — the market structure most often found in industrialized economies — does not necessarily entail an absence of competition. On the contrary, in fact, in conditions of rapid technological innovation oligopolistic competition tends to be more intense and aggressive (compared with the idealized paradigm of perfect competition). Oligopolistic competition usually takes place in a climate of strong rivalry, using strategies of pre-emption or mutual deterrence that result in cycles of simultaneous investment by the rivals. These cycles often generate high levels of excess capacity — levels that are "unplanned" in the sense that they go far beyond the margins of idle capacity desired by the companies participating in the oligopoly. In these conditions of vast excess capacity, if companies face weak markets there is more opportunity for sporadic price wars.

Competitive oligopolistic structures can occur in markets with various configurations (differentiated or undifferentiated goods and services, durables or non-durables), since the key variable is whether the conditions exist to challenge the dominant players, i.e. market contestability and entry/exit barriers. If such conditions exist, antitrust regulation can assume a stance of relative laxity. The risks in this case

have to do not with large players' abuse of their dominant position but with frequent collapse or bankruptcy (due to overinvestment), and all the negative consequences these events may mean for consumers or users. In such cases the regulators should be concerned above all with avoiding the excesses of out-and-out competition.

3 CARTELIZING OLIGOPOLIES AND CARTELS

In conditions of low market contestability (high entry/exit barriers) and/or slowness with controllability and/or imitability of technological progress by the firms participating in the oligopoly, competition tends to be replaced by cartelizing behavior. This behavior comprises practices that include market segmentation and/or regionalization, price fixing and, at the extreme, coordination of decisions to invest and introduce innovations.

This latter point, however, depends on a calculation about the degree to which technological progress could be monopolized. Easily imitable innovations do not undermine cartelizing practices, whereas product or process innovations that can be protected with patents and are hard to reproduce by reverse engineering may tempt the firm that owns them to use them as a weapon to outdistance others through offensive market gain strategies at odds with cartelizing practices.

For these reasons antitrust regulation is essential in such cases but should not be confined simply to inefficient attempts to break up oligopolies to the detriment of scale economies. The focus of regulation should properly be on conditions for market entry and diffusion of innovations (e.g. facilitating entry by removing barriers and protection), complemented by an explicit and vigorous policy of enforcement of antitrust laws and punishment of cartelizing behavior.

4 NATURAL MONOPOLIES, NETWORK INFRASTRUCTURES AND EXTERNALITIES

Significant increasing returns to scale can create unbeatable cost advantages and lead to market domination by a single entrepreneur. The usual origin of increasing returns to scale is dilution of high fixed cost as revenue expands without a marginal increase in variable cost (which tends to be constant relative to operating scale). In general, large infrastructures in the form of highly capital-intensive networks (e.g. water supply, sanitation, power distribution, transportation, landline telephony etc) are subject to increasing returns to scale due to dilution of fixed cost, constituting natural monopolies. The fact that public utilities are natural monopolies is no coincidence, since by nature these services are intrinsically designed to serve as many people as possible and thus entail a need to develop large-scale networks.

Given the essential nature of public services, the relative amplitude of their infrastructure networks makes them bearers of positive externalities for social welfare,

by virtue of integration effects or other related effects that also increase social benefits. To maximize the social utility of these services they must pursue universalization, thus extending beyond the limits of the market, i.e. the limits dictated by minimally profitable exploitation taking into account the affordability of prices within the scope of most people's income.

This cluster of characteristics — monopolies based on strong returns to scale, high capital intensity and long payback periods, network structures tending to produce positive externalities, and a social mission — not only makes public regulation absolutely necessary but also, as we shall see, requires that these characteristics be specifically comprehended before planning privatization or the introduction of competition. Ideological generalization of the neoliberal paradigm (privatization-deregulation) without taking sectoral specificities into account tends merely to cause economic efficiency, contradicts the social mission of public utilities, and is inadequate to deal with the effects of externalities.

5 IMPERFECT CONDITIONS FOR MATCHING THE PRIVATE MODEL TO PUBLIC UTILITY SECTORS

The basic tension between the private business model whose aim is to maximize rates of return in conditions of capital scarcity and the provision of essential public services resides in the nature of the latter's social mission. As already noted, this mission entails the obligation to seek maximum social coverage (ideally universalization) whereas private maximization of rates of return is governed by criteria for calculating the profitability of service offerings so as to obtain the largest possible volume of profit in given cost and demand conditions.

Private investors usually expect very high rates of return (which reflect the scarcity of capital and the specific risks of private ventures and, in the case of Latin America, reflected and still reflect very high spreads for sovereign risk) in comparison with the rate of return that is socially desirable or practiced in the public sphere.³ The highly capital-intensive nature of infrastructure sectors, which require investors to risk large volumes of their own equity capital, tends to make this contradiction even more acute. By demanding higher rates of return, private investors oblige utilities to set higher prices so that their assets and other capital holdings are adequately remunerated, and these high charges mean the low-income segment of the population cannot afford the services.

For this reason, to attenuate the risk of social exclusion the government (directly or via a regulatory agency) must establish cross-subsidy schemes or introduce subsidies into its budget in order to extend social coverage (ideally targeting universal access). Contrary to the neoliberal prescription, competition is ineffectual in such cases. If it were possible to introduce competition (via forced infrastructure sharing

by new entrants), this would naturally tend to generate an intense dispute for the most profitable market segments (business customers and high-income users). Prices would fall in those segments, while the service offering for low-income users would contract or be downgraded. In other words, competition would probably erode the source of funding for cross-subsidies (high profit rates in high-income markets). Thus the imposition of calibrated universal-access targets upon monopolist licensees, forcing them to transfer extraordinary profits in the form of benefits to low-income users, seems to be a solution that approaches the maximization of social utility.

However, calibrating and benchmarking such targets is no simple task. If regulation is too heavy it may inhibit investment in expansion of the system. Because the large amounts of fixed capital invested in infrastructure are “sunk costs” (non-recoverable fixed costs), the regulator can be tempted to maximize targets or social benefits in the knowledge that the licensee has an interest in offering such services provided it can at least cover the variable cost. But in this situation prices would not cover amortization of fixed capital at the desired rate of return. As a result, without being able to obtain the desired return on investment and without guarantees that protect them from redistributive conduct by the regulator (“regulatory risk” in the jargon of the private calculus), investors would abstain from injecting more capital.

These considerations illustrate the argument that the presence of substantial market imperfections requires intervention by public regulators, while underlining on the other hand the need to ensure that this intervention is not so burdensome for private licensees that it reduces their propensity to invest in network expansion or even brings investment to a halt. In some cases it may be very difficult or impossible for the regulator to reconcile the maximization of social benefits with the private investor’s requirement of satisfactory profitability. Under such conditions the concession or license could be granted to a public-sector enterprise, which in theory would be better suited to offer the services because it could operate at a far lower rate of return.

6 DEFICIENCIES OF THE STATIST SOLUTION

If opting to delegate public service provision to a state-owned enterprise tends to be a superior solution in welfare terms because a utility in the public sector can operate at a lower rate of return better suited to the social nature of the service, and because it has more affinity with long-term planning, on the other hand this solution involves important risks of inefficiency. State-owned enterprises tend to be more vulnerable to politicization and corporatism, especially in the absence of a system of governance with transparency and rules designed to foster productivity and efficiency.

Bureaucratic rules, tax laws, accountability, and public controls (audits etc) tend to establish a framework that restricts freedom of management for state-owned

enterprises. This in and of itself may result in higher costs, slow decision making, and sluggish execution. At the same time these legal and regulatory constraints tend to fuel practices of self-protection and risk aversion, which may distort management decisions.

State-owned enterprises also face risks of instrumentalization by government in pursuit of its own priorities (they may be used as vehicles for external or internal indebtedness, for example, or to carry out other policies, relating to regional, industrial or technological development etc). In governmental and political systems with little transparency, state-owned enterprises can be instrumentalized by the powers that be and become vulnerable to clientelism, cronyism, corruption, and inefficiency in adjusting costs if this causes losses (e.g. jobs, contracts, procurement) for their respective clienteles. The fact that they operate monopolistic infrastructures creates the risk of transferring these inefficiencies to society, either through higher prices (in stark contrast with the reason for preferring state ownership in the first place) or via recognition of losses that will have to be assumed by the government. The worst possible outcome for society is one in which inflated operating costs are combined with underinvestment.

7 POSSIBILITIES FOR REHABILITATING STATE OWNERSHIP

Recognition of the risks and deficiencies of state ownership, however, should not lead ineluctably to the conclusion that private ownership is the only possible option, especially if it is extremely cumbersome or costly to ensure that private enterprise is compatible with the social obligations of public service provision. On the contrary, the appropriate solution in this case is rehabilitation of state-owned utilities within a regulatory framework that separates the functions of government (political priorities) from those of the regulator (whose mission to protect the public interest should be made explicit for each case) and those of each state-owned enterprise charged with providing public service.

The existence of an independent regulator that focuses on the pursuit of maximum efficiency combined with simultaneous maximization of social benefits should serve to counterbalance the powers of a state-owned monopolist, especially if there are clear rules governing the conduct of its employees, public participation (through hearings and other procedures), and transparency and accountability.

This separation of functions between public regulator and state-owned operator (equally public) should enable the latter to be flexible and take decisions quickly under the non-bureaucratic oversight of the former (based on rules and performance metrics or management contracts rather than discretionary controls). In a democratic regime with a minimum of stability, it is perfectly possible to construct institutional mechanisms of control that discourage the inefficiency and

opacity once characteristic of the state sector (especially in developing economies). Such mechanisms include rewards for efficiency and clear rules governing accountability.

8 REGULATION IS INDISPENSABLE AND MUST BE SPECIFIC

Far from being redundant and replaceable with market mechanisms, regulation is indispensable as a means of minimizing the impact of market failures. Furthermore, it is the only way of correcting for the inadequacies of both the private business model applied to public services and the deficiencies of public-sector ownership.

In the case of the private model, the inadequacy derives mainly from the intrinsic requirement of high rates of return, which naturally entails higher prices or user charges than would be sufficient to provide the lower returns suitable to social criteria. There is the additional difficulty of spontaneously ensuring that services are accessible to low-income users, who usually do not provide profitability at the desired level (let alone above it). The public regulator plays a fundamental role in stimulating or conditioning the private operator's performance so as to obtain the widest possible coverage in conditions of reasonable profitability. Cross-subsidies may represent a more efficient mechanism in this regard, although they should be used with prudence in order not to entail excessively high prices for middle- and upper-income users or seriously jeopardize the competitiveness of business users. Moreover, even if cross-subsidies are taken to an extreme they may not be sufficient to ensure that services are affordable to the poorest members of society. In this case extension of services to low-income citizens (especially in countries with highly unequal societies like Brazil) will depend on subsidies allocated directly to the government's budget, although implementation of subsidies in this way is subject to severe constraints for fiscal reasons.

Public regulation is also indispensable to rehabilitate the state ownership model. From the standpoint of rates of return (social and thus lower) and the willingness to run risks in obedience to a long-term government planning scheme, state-owned enterprises are better suited to operate utilities and provide essential public services. However, they are more susceptible to political instrumentalization and "capture" by workforce corporatism and/or vested interests of other kinds (suppliers or management, for example). An independent and impartial public regulator can be charged with introducing rewards for efficiency and measures to deter the distortions typical of state-owned enterprises. In democratic regimes it is perfectly possible to minimize the risk of regulatory capture by vested interests, subjecting regulatory agencies to parliamentary oversight and making them accountable to society as whole within an overall framework designed to ensure transparency and impartiality.

It bears repeating that the choice of model and the design of a regulatory framework require careful case-by-case analysis of all characteristics of each service and the respective network or infrastructure. The choice of model and the corresponding regulatory format therefore depend on objective economic and financial conditions, i.e. capital intensity, sunk costs, payback, working life, amortization, demand characteristics and conditions (degree of essentiality, price and income elasticity), capital cost, borrowing cost, and the speed and other characteristics of technical progress.

Evidently the private model is more easily adjusted to services or networks that are less capital-intensive and have shorter payback periods, besides showing more propensity to technological progress and less demanding requirements as far as universal access is concerned. Conversely, the state ownership model seems in principle to be more adequate for infrastructure with relatively greater capital intensity and longer payback, as well as more significant effects of externalities (not capturable by private operators but relevant to social welfare) and more stringent demands regarding universal access.

9 THE CHALLENGE OF REGULATING FOR DEVELOPMENT: THE NEED FOR PLANNING

The regulatory framework should evidently be designed in accordance with the characteristics of the model chosen, private or public. Regulation also needs to be specific and compatible with the essentiality of services, with demand conditions (relevant income and price elasticities), with the pattern of technological progress in each sector, and with the efficacy of the possible mechanisms to promote or mimic competition (which under no circumstances should destroy synergies and scale economies in order to avoid introducing counterproductive inefficiencies).

Thus it is no small task to choose the more efficient model and design the most adequate regulatory framework. There is also the complementary, and equally challenging, task of institution building and implementing safeguards to ensure that efficiency, transparency and accountability are built into the regulatory system.

Alongside the challenges of public choice and institution building it is also necessary to assure the expansion of utility infrastructures, especially in developing countries, where such expansion is of paramount importance. For this reason the choice and design of a model that is both as economically efficient as possible and compatible with the social mission of the public services involved must not minimize the importance of assuring their expansion. In developing countries, models for operating/regulating these services should have a pro-investment bias, given the enormous deficit in basic services and the significant external economies generated by infrastructures.

In light of this last point, and considering the potential uncertainty due to the indivisibility of investment in these sectors and the long payback periods involved,

it is most important to give public-sector planning a central role once again. The function of planning in providing signals or guidelines for long-term investment decisions and reducing uncertainty is indispensable and complementary, whichever operating model is adopted, private or public. It is also worth noting that planning will be all the more effective if it is closely linked with the institutions that provide development finance (e.g. domestic public banks and multilateral lenders for long-term credit), whose participation is crucial to reduce capital cost and enable viable funding structures to be engineered for investment in infrastructure. The planning function may or may not be directly subordinated to the regulator. This will depend on the model. In any event it is indispensable that a public, long-term, technically qualified perspective be adopted. The advantage of keeping planning and regulation independent of each other is that institutional separation minimizes potential conflicts of perspective between one agent that focuses on performance oversight and the other whose main concern is driving expansion of the system.

10 SOME CONCLUDING THOUGHTS

The purpose of this short paper is to demonstrate that the thorny task of the public regulator, who must try to reconcile maximization of social benefits with the need to guarantee satisfactory profitability for the licensee, be it private or state-owned, cannot be accomplished by means of generalizing norms. There is no such thing as an optimal paradigm that can be adopted a priori and dispenses with long-term planning based on an analysis of the specific requirements of each sector. It is impossible to design an efficient model and regulatory framework without understanding the characteristics of the market, the conditions for profitability, the conditions for competition, and the pace of innovations that redefine business models. A holistic understanding of all these factors, based on a long-term view and pro-investment bias, is indispensable to any effort to define the most efficient and appropriate model for each case.

The problem with the weak results observed in Brazil and Latin America is that ideological adherence to the neoliberal paradigm prevented prior reflection of sufficient depth about ways and means of ensuring the proper specification and formatting of the private model and the efficacy of the conditions for competition to be introduced. Nor was anything done institutionally to develop sufficient and proficient regulatory conditions. It now remains to face the even more daunting challenge of correcting what exists and creating efficient and socially benign models for operation and regulation of public service infrastructures, so as to assure their expansion at a fast enough pace to provide adequate support for economic and social development.

NOTES

1 The state is depicted as a “bête noire” packed with bureaucrats eager to create difficulties in order to sell facilities, serving interest groups that allegedly buttress the bureaucracy to fabricate privilege and protections in order to extract rent from them. Thus regulators are suspected of having their own agenda (maximization of power and prestige) and, the argument concludes, are highly prone to deviant behavior and corruption.

2 Economies of scale exist not just at the level of manufacturing plants but also in the sphere of the business structures that comprise activities such as management, finance and marketing. The existence of relatively high transaction costs represents another factor that determines the capture of scale economies by taking certain activities into the structure of large corporations. Thus to understand the causes of increasing returns to scale at the level of the business organization it is not enough to observe technical economies of scale circumscribed to production (at the level of the plant).

3 The private rate of return utilized as the basis for investment decisions is usually a weighted average of the desired rate of return on equity and the “cost” of borrowed capital (in the form of bank loans and/or bonds issued in the capital market). The desired return on equity is usually higher than the cost of borrowed money. In most cases of privatization in Latin America in the 1990s the required return on equity was in the range of 18%-20% per annum, a very high rate. This is why services had to be priced relatively high.

Prof. Luciano G. Coutinho

PROFESSOR OF ECONOMICS AT
UNIVERSITY OF CAMPINAS - UNICAMP

